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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,230	07/13/2001	Naoki Yumiyama	YMOR:214	9837
27890	7590	06/29/2005	EXAMINER	
STEPTOE & JOHNSON LLP 1330 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036				ORTIZ CRIADO, JORGE L
ART UNIT		PAPER NUMBER		
2655				

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/889,230	YUMIYAMA, NAOKI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jorge L. Ortiz-Criado	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 31 January 2005.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters; prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-4 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. Claim 1 is objected to because of the following informalities:

In line 6 of the claim “annular” should be ‘angular’.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 1 recites the limitation “controlling the spindle motor at an angular velocity lower than a maximum “angular” velocity assigned to CAV control from start of spin-up processing”.

The examiner cannot ascertain/map where in the specification including the detailed description and the drawings this limitation is found. Specifically, the spindle motor is controlled to be CAV with **NO** specific speed, and **from start** (**step 1** in Fig. 1) of spin-up processing the speed is **NOT** lower than maximum velocity, and **NO** mention is made either in the detailed description or shown in the drawings to support the feature as claimed.

Claims 3 recites the limitation “changing the first CAV controlled angular velocity to a second CAV controlled angular velocity that is lower than a maximum angular velocity of the spindle motor, and sequentially acquiring a LEAD-IN final address, measuring constant linear velocity (CLV) of a recording medium...”

The examiner cannot ascertain/map where in the specification including the detailed description and the drawings this limitation is found. Specifically, the spindle motor is controlled to be CAV with **NO** specific speed, and **from start** (**step 1** in Fig. 1) of spin-up processing the speed is **NOT** lower than maximum velocity the subsequence steps S2-S3 in Fig. 1 are **NOT** performed at an angular velocity lower than a maximum angular velocity of the spindle motor.

**As far as the claims recite positive limitations, the following art rejections are made.**

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by “Applicants admitted prior art”.

Applicants admitted prior art discloses an optical disk reproducing device for reproducing a disk-shaped recording medium on which a recording has been made, comprising:

constant angular velocity (CAV) means for controlling a spindle motor during a period from start of spin-up processing of such a disk-shaped recording medium to a read standby state (see Fig. 2; see Fig. 3, step S5, S6)

Regarding claim 2, Applicants admitted prior art discloses wherein said CAV means for controlling a spindle motor is for controlling the spindle motor when a disk-shaped recording medium rotates at a low speed se page 1, lines 6-16; Fig. 2)

- The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ishihara et al. U.S. patent No. 5,805,548.

Regarding claim 1, Ishihara et al. discloses an optical disk reproducing device for reproducing a disk-shaped recording medium on which a recording has been made, comprising:

constant angular velocity (CAV) means for controlling a spindle motor at an angular velocity lower than maximum angular velocity assigned to CAV control from start of spin-up processing of such a disk-shaped recording medium to a read standby state (See col. 8, line 30 to col. 9, line 44; col. 10, line 61 to col. 11, line 54; col. 14, lines 43-52; Figs. 1,2,5 and 10; the constant angular velocity means of Ishihara et al. controls the spindle motor at a standard angular velocity, and then a second which is **lower than maximum, maximum or any speed**)

Regarding claim 2, Ishihara et al. discloses wherein said CAV means for controlling a spindle motor is for controlling the spindle motor when a disk-shaped recording medium rotates at a low speed (See col. 8, line 30 to col. 9, line 44; col. 10, line 61 to col. 11, line 5; col. 14, lines 43-52; Figs. 1,2,5 and 10)

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3 and 4 rejected under 35 U.S.C. 103(a) as being unpatentable over “admitted prior art” in view of U.S. patent No. 5,805,548.

Regarding claim 3, the “admitted the prior art” teaches a method of spin-up processing for reproducing a disk-shaped recording medium on which a recording has been made (See page 2, lines 4-7; see flowchart of Fig. 3), the method comprising:

acquiring a LEAD-IN final address (See page 2, lines 16-18; see Fig. 3 step2 and step 3);  
measuring constant linear velocity CLV of a recording medium, (See page 2, lines 18-19;  
see Fig. 3 step 4) and

setting an **angular velocity (CAV)** of a disk-shaped recording medium to be **slower than maximum rotational speed to perform a predetermined processing** (See page 2, lines 23-25;  
see Fig. 3 step 6);

reading table of contents (TOC) heading from the recording medium (see page 2, lines 26-27, step 7)

acquiring information for providing data with a high-level function (SUB-Q) (see page 2, lines 28-30, step 8),

performing a READ SET operation (see page 2, lines 31-32, step 9), and

performing HOLD TRACK (See page 2, lines 33-34; see Fig. 3 step 10).

The admitted prior art does teaches controlling a spindle motor by constant angular velocity (**CAV**) control during spin-up processing to a read standby state.

The admitted prior art does not teach controlling a spindle motor by constant angular velocity (**CAV**) control from start of spin-up processing to a read standby state.

However, this feature is well known in the art and is evidenced by Ishihara et al., which discloses an optical disk reproducing device for reproducing a disk-shaped recording medium on which a recording has been made with a **constant linear velocity (CLV)**, comprising constant angular velocity (**CAV**) means for controlling a spindle motor from start/during of spin-up processing of such a disk-shaped recording medium to a read standby state (See col. 8, line 30 to col. 9, line 44; col. 10, line 61 t col. 11, line 5; col. 14, lines 43-52; Figs. 1,2,5 and 10).

Therefore it would have been obvious to one ordinary with skill in the art at the time of the invention to set the spindle motor to be driven under CAV control and accomplish the spindle motor during process "during a start-up period" from start of the spin-up processing to a read standby state in order to reduce the time period of search/seek operation after, efficiently reproducing the disk in short time, reducing power consumption and further efficiently controlling the transfer rate of the reproduction, as suggested by Ishihara et al.

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Regarding claim 4, the “admitted prior art” further teaches wherein setting angular velocity of a disk-shaped recording medium to be slower than a maximum rotational speed comprises setting angular velocity to be half of the maximum rotational speed (See page 2, lines 23-25; see Fig. 3 step 6).

***Response to Arguments***

8. Applicant's arguments filed 05/27/2005 have been fully considered but they are not persuasive.

Applicants argues that Ishihara et al. or “Applicants admitted prior art” does not discloses teaches or suggest a constant angular velocity (CAV) means for controlling a spindle motor at an angular velocity lower tan maximum angular velocity assigned to CAV control “from start/during” of spin-up processing of such a disk-shaped recording medium to a read standby state.

The Examiner cannot concur because the constant angular velocity means of Ishihara et al. controls the spindle motor at a standard angular velocity, and then a second which is **lower than maximum, maximum or any speed**,

Furthermore, Applicants admitted prior art” discloses a constant angular velocity (CAV) means for controlling a spindle motor at an angular velocity lower tan maximum angular velocity assigned to CAV control “during” of spin-up processing of such a disk-shaped recording medium to a read standby state (See page 2, lines 23-25; see Fig. 3 **step 6**);

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***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L. Ortiz-Criado whose telephone number is (571) 272-7624. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm),Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne R. Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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